

532, 309

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number  
**WO 2004/037216 A1**

(51) International Patent Classification<sup>7</sup>: **A61K 7/00, 7/06**

(21) International Application Number:

PCT/EP2003/011936

(22) International Filing Date: 28 October 2003 (28.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

02 257 455.2 28 October 2002 (28.10.2002) EP

(71) Applicant (for all designated States except US): **PHARES PHARMACEUTICAL RESEARCH N.V.** [NL/NL]; P.O. Box 5052, Emancipatie Boulevard 31, Curacao (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEIGH, Mathew, Louis, Steven** [GB/CH]; Hardstrasse 111, CH-4052 Basel (CH). **LEIGH, Steve** [GB/CH]; PHARES Drug Delivery AG, P.O. Box, Klauenfeldstrasse 30, CH-4132 Muttenz (CH). **VAN HOOGEVEST, Peter** [NL/CH]; Breitenstrasse 3, CH-4416 Bubendorf (CH). **KUNG, Elsa** [CH/CH]; Rudolfstrasse 39, CH-4054 Basel (CH).

(74) Agents: **SCHREIBER, Wolfgang, F. et al.**; Riederer Hasler & Partner Patentanwälte AG, Elestastrasse 8, CH-7310 Bad Ragaz (CH).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MICRODISPERSION AND METHOD OF PRODUCING SAME

(57) Abstract: The invention describes homogeneous microdispersions comprising at least one hydrogenated or partially hydrogenated membrane lipid with or without enzyme hydrolysis, dispersed in substantially non aqueous, non volatile hydrophilic medium with boiling point above 40°C. More preferably the compositions comprise a mixture of hydrogenated monoacyl and hydrogenated diacyl-lipids and at least one oil. The phospholipid mixture is obtained by controlled enzyme hydrolysis of lecithin or a specific phospholipid, followed by hydrogenation. The compositions have improved rheology, physical and chemical properties, functionality and industrial applicability. The microdispersions are used as such in all types of applications and as functional components with active compounds in products, particularly for improving skin function and facilitating skin repair due to UV damage and aging, in cosmetics and other topical products.

WO 2004/037216 A1